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NATIONAL METROLOGY TECHNICAL SPECIFICATION OF THE PEOPLE'S REPUBLIC OF CHINA

JJF 1430-2013

Calibration Specification for X-ray Timers

X射线计时器校准规范

(English Translation)

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Introduction

This specification based JJF 1071-2010 "National Calibration Specifications writing rules" establishment.

This specification reference to GB 9706.3-2000 "Medical electrical equipment - Part 2. Diagnostic X-ray generator the high-voltage generator for the safety requirements "and YY/T 0106-2008" diagnostic X-ray machine general technical conditions " the technical requirements and load time X-ray timers usually write specifications.

The specification for the first time to develop.

X-ray timer

1 Scope

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This standard applies to electrical signal interface X-ray calibration timer.

2. References

This specification refers to the following documents.

GB 9706.3-2000 Medical electrical equipment - Part 2. High-voltage generator means of diagnostic X-ray generator Requirements for safety YY/T 0106-2008 medical diagnostic X-ray machine general technical conditions for dated references, only the dated edition applies to this specification; undated reference documents Member, the latest edition (including any amendments) applies to this specification.

3 terminology and units of measurement 3.1 exposure time irradiationtime Also known as the irradiation time. The duration of the irradiation of X-ray machines, usually radiation dose rate exceeds a specified level Room, measuring in milliseconds, a unit symbol ms.

Note: the irradiation time is usually based on load time measurements obtained.

3.2 load time loadingtime the positive input power level is applied to the X-ray tube of the time. Usually refers to the first X-ray tube voltage rises to a peak 75% until last fall to the same time interval value only, units of measurement in milliseconds, a unit symbol ms.

Note:

1 For a tube or the X-ray tube by using a gate high voltage system load electronic switch control, when you load time can be played in accordance with the limit means limit means generates the load signal is terminated only when the load signal generated from the beginning Intervals to be determined.

2 For a high-voltage circuit in winding or in the X-ray tube filament heating circuit through the analog switch control loading system EC, the loading time can be in accordance with the first X-ray tube current rises to a peak of 25% last played under X-ray tube current A time interval to be determined only when reduced to the same value.

3.3 sensitivity X-ray timer can work and meet the requirements of the minimum measurement error in measuring signal values.

Note:

Minimum input signal amplitude peak to peak X-ray timer square wave, measuring sensitivity refers to a DC electric signal measurement mode ms in volts, unit symbol V;

2 AC electrical sensitivity refers to the input X-ray timer single-phase half-wave rectification or full-wave rectified signal pulse counting mode measurements RMS rectified before the same peak sinusoidal AC electrical signal measurement in volts, unit symbol V;

3 X-ray signal sensitivity ordered X-ray timer can work a minimum X-ray power, measured in units of kV, milli Ann, unit symbol kV, mA.

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